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BULLETIN
OF THE
TORREY BOTANICAL CLUB

DECEMBER, 1907

A new *Utricularia* from Long Island

JOHN HENDLEY BARNHART

(WITH PLATE 34)

One September day, six years ago, while I was walking along the shore of a small pond near Riverhead, on Long Island, I observed a small colony of plants of a terrestrial *Utricularia*. At first sight it appeared different from any species previously reported from the northeastern United States; as a careful study of the fresh material confirmed this view, another visit was made to the locality a few days afterward and the plant collected as liberally as consideration for the perpetuation of the single small patch would permit. The bladderworts, however, are very fickle, appearing and disappearing in a given place from year to year, and several subsequent visits to the original locality have failed to bring this plant to light again.

Although the species was apparently new, and careful notes had been made upon the fresh material and a fair quantity of herbarium material collected, publication was deferred in the hope that further collections might be made. Two years later, Mr. Bicknell brought in from Woodmere, Long Island, for the herbarium of the New York Botanical Garden, specimens of the same *Utricularia*, in flower. Meanwhile my own material had been mislaid, and when it was located again, a few months ago, it seemed best no longer to delay the publication of the novelty.

The species here proposed as new belongs to a group which has comprised, in our northeastern flora, only two species, *U. cornuta* Michx. and *U. juncea* Vahl. They agree in having

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strictly erect scapes, "rooting" in mud (there are no true roots in *Utricularia*, these root-like organs being actually caulome); stems radiating from the bases of the scapes, extremely slender and delicate, so that they usually break off short and are very rarely collected; some of the leaves filiform, root-like, and bladder-bearing, others linear and resembling minute blades of grass; flowers subspicate, the pedicels being shorter than the bracts; bracts trifid; and palate of the corolla laterally compressed, not lobed.

***Utricularia virgatula* sp. nov.**

Stems extremely delicate, radiating from the base of the scape, on or just beneath the surface of the soil: leaves scattered, undivided, linear, 4–8 mm. long, some erect, green-tipped, and bladderless, others root-like, colorless, and bladder-bearing: scapes fixed in the mud, erect, wiry, brownish, 2–20 cm. long; scales several, minute, acute; bracts minute, less than 1 mm. long, trifid, the middle lobe much broader than the lateral ones: flowers 1–6, subsessile: calyx purplish, the upper lobe broadly ovate, acuminate, 4 mm. long, the lower ovate, acute, only half the width of the upper, 2.5 mm. long: corolla yellow; upper lip spatulate, emarginate, barely if at all exceeding the upper calyx-lobe; lower lip about the length of the upper, entire, apiculate, consisting almost wholly of the laterally compressed palate, with a minute tuft of hairs in the throat; spur pendent, conical, acute, 2–3 mm. long: capsule subspherical, 1.5–2 mm. in diameter, purplish, closely invested by the persistent calyx-lobes, and slenderly beaked by the acuminate upper one; placenta spherical, stipitate, seed-bearing throughout: seeds very minute and numerous (about 750 in each capsule), oval in outline, the surface prominently reticulate.

NEW YORK: Near Riverhead, Suffolk County, September 4–13, 1901, *J. H. Barnhart* (type, in the author's herbarium); Woodmere, Nassau County, September 13, 1903, *E. P. Bicknell* (in the herbarium of the New York Botanical Garden).

The following material may also be referred here, with some doubt:

NEW JERSEY: Cold Spring, Cape May County, August 20, 1891, *Stewardson Brown* (in the herbarium of the Academy of Natural Sciences of Philadelphia, sheet no. 502,805).

Of our northeastern species, *U. virgatula* is most closely related to *U. juncea*, its most striking differences being the small size of its scapes, and its miniature corollas, the largest barely exceeding

the calyx, while those of *U. juncea* are conspicuous. *U. juncea* is a species of distinctly southern range, and has not been hitherto reported as occurring on Long Island, as far as I am aware. It was found by me, however, in September of the present year (1907), near Riverhead, in a pond adjoining that from which *U. virgatula* was first taken. Its occurrence on Long Island is not at all remarkable, but it is surprising that it has so long escaped detection.

Closer still is the relationship of *U. virgatula* to the *U. simplex* of Charles Wright, first described from Cuba, and since reported from Florida. The resemblance is indeed so close that I am unable to name any character by which they may be distinguished. However, the name *U. simplex* has been in use for nearly a hundred years for an entirely different Australian species (*U. simplex* R. Br.), so that Wright's species is without any tenable name; instead of renaming it, it seems better to refer the material from Cuba and Florida provisionally to *U. virgatula*. If future comparisons should prove that the southern material is distinct, it will then be necessary to assign it a new name.

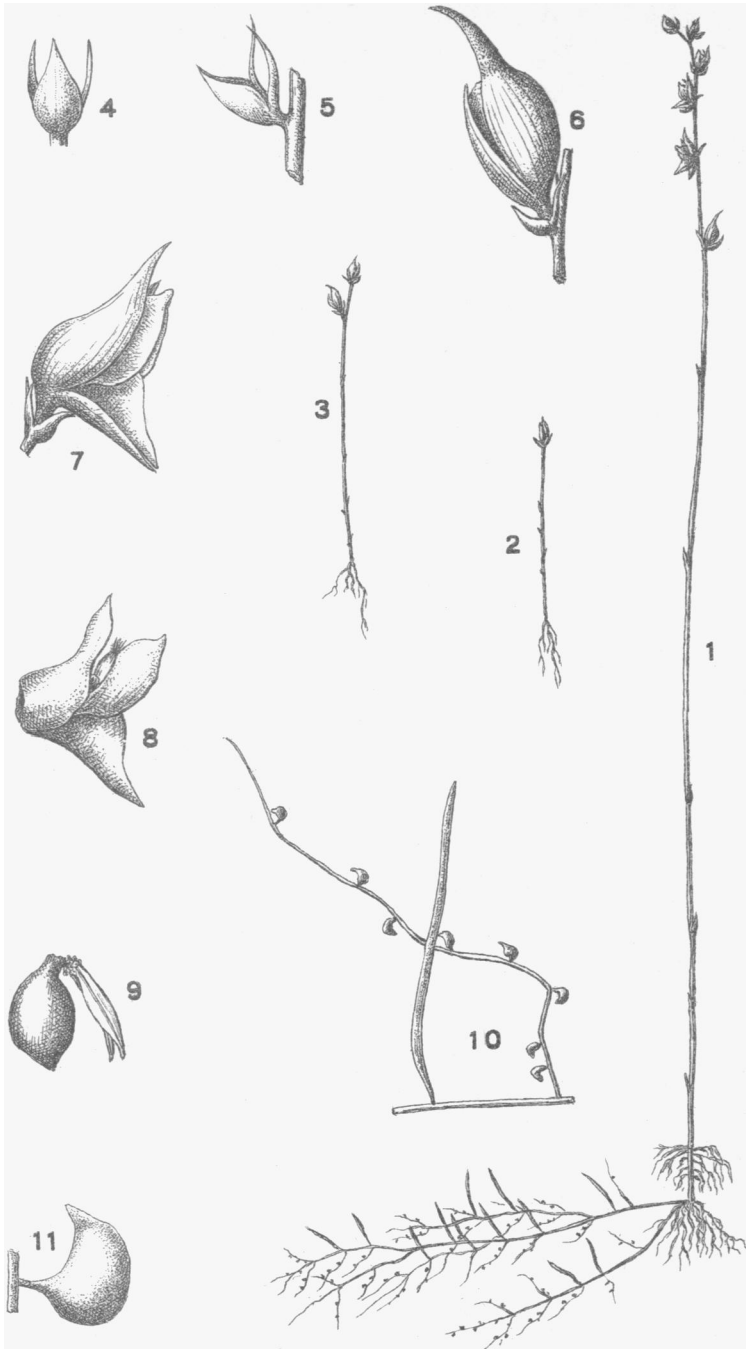
It might seem unreasonable to suggest that a gamopetalous spermatophyte found in Florida could be conspecific with one found in New Jersey, no intermediate stations being known; yet as a parallel case may be cited another species of the same genus. *U. resupinata* B. D. Greene was discovered about seventy-five years ago in eastern Massachusetts; one by one other localities came to light, until now it has been found in every one of the New England States, New York, New Jersey, Pennsylvania, Michigan, and Indiana. The same species, or one so closely resembling it that no one has yet distinguished it, is now known to be fairly common in Florida, and has been collected in southern Georgia; but no stations are known intermediate between these extreme southern ones and those in New Jersey, Pennsylvania, and Indiana.

In several of his published papers (Bull. Torrey Club 30: 323, 324; Rhodora 7: 72, 73), Dr. Roland M. Harper has called attention to similar apparent breaks in the distribution of various other flowering plants, such as *Rynchospora fusca*, *Eleocharis Robbinsii*, *Cladium mariscoides*, *Eriocaulon septangulare*, and *Habenaria blephariglottis*.

NEW YORK BOTANICAL GARDEN.

Explanation of plate 34*UTRICULARIA VIRGATULA* sp. nov.

- 1, 2, 3. Entire plants, natural size.
- 4, 5. Trifid bract, $\times 8$.
6. Capsule, with sheathing calyx, $\times 8$.
7. Flower, $\times 8$.
8. Corolla, $\times 8$.
9. Gynoecium and androecium, $\times 8$.
10. Portion of stem with two leaves, one bladder-bearing, the other bladderless, $\times 8$.
11. Bladder, $\times 50$.



UTRICULARIA VIRGATULA Barnhart.